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Developing Sophisticated Reasoning Through Experiential Cognitive Dissonance

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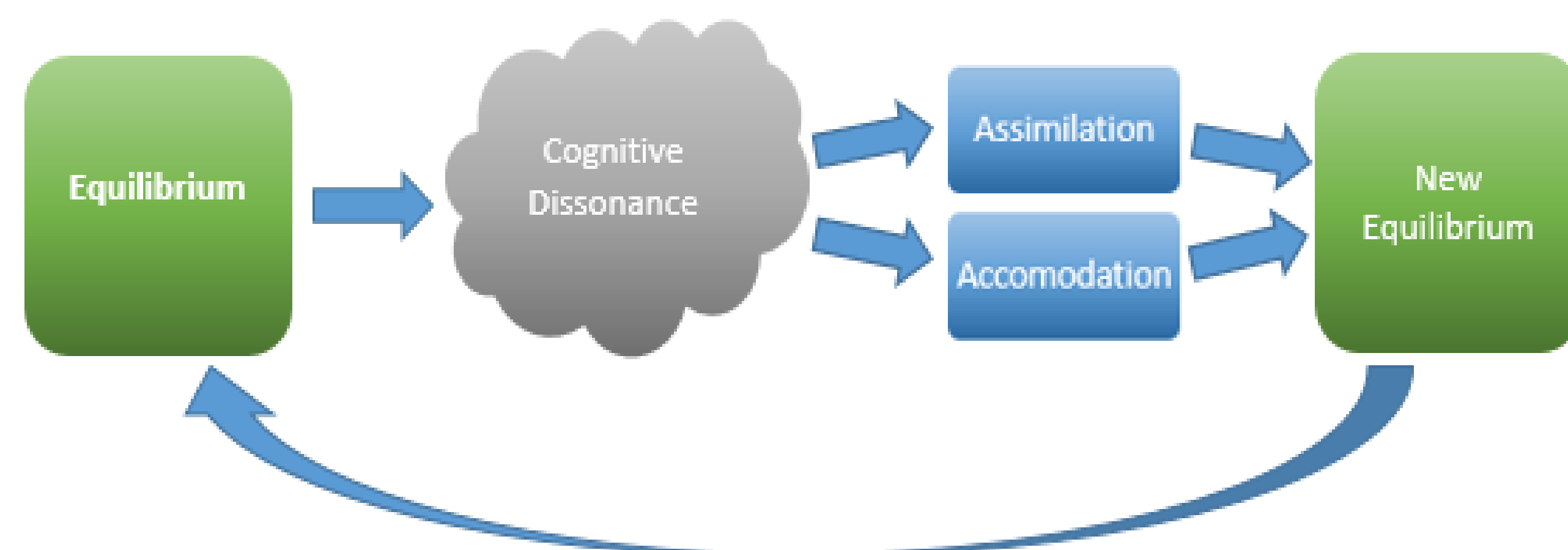
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SUMMARY

Cognitive theorists believe that children navigate through disequilibrium to develop increasingly sophisticated thinking. A lesson plan based on cognitive perspective was developed to prepare students to resolve cognitive dissonance.

ABSTRACT

In Jean Piaget's theory of cognitive development, equilibration promotes increasingly complex forms of thought. When children encounter new events that they can interpret and respond to using either actions or thoughts (schemes), they experience equilibrium. Children assess schemes as they learn from experiences, modifying and forming new schemes through the process of assimilation and accommodation. Assimilation is when children can respond to and possibly interpret events in a way that is consistent with existing schemes, while accommodation requires modification or the formation of a new scheme (Ormrod, 2016). As children age, they increasingly meet situations in which their current knowledge is inadequate, causing a state of disequilibrium, or cognitive conflict. Children who are able to resolve this mental disharmony and move from disequilibrium to equilibrium, develop more advanced levels of reasoning (Ormrod, 2016).



In the current study, we aimed to design a lesson plan with such a cognitive-developmental perspective to equip eleventh graders with proper mental tools for effective equilibration in class and throughout their lives. By crafting a controlled state of cognitive dissonance, tempered with humor to balance the potentially heavy cognitive load, students learn to recognize and constructively respond to the psychological phenomenon of disequilibrium. Practicing this evaluation of individual cognitive dissonance during the critical-thinking exercises prepares students in consciously processing assimilation and accommodation; specifically, in regards to how their knowledge could be narrow, flawed, or improved upon. Students identify how cognitive dissonance can hinder communication, debate, research, and understanding of complex topics or diverse perspectives when handled inappropriately.

REFERENCES

Inman, M., 2018. *You're not going to believe what I'm about to tell you*. Retrieved from https://theoatmeal.com/comics/believe_clean.

Ormrod, J.E., 2016. *Human Learning* (7th ed.). Harlow, Essex: Pearson Education Limited.

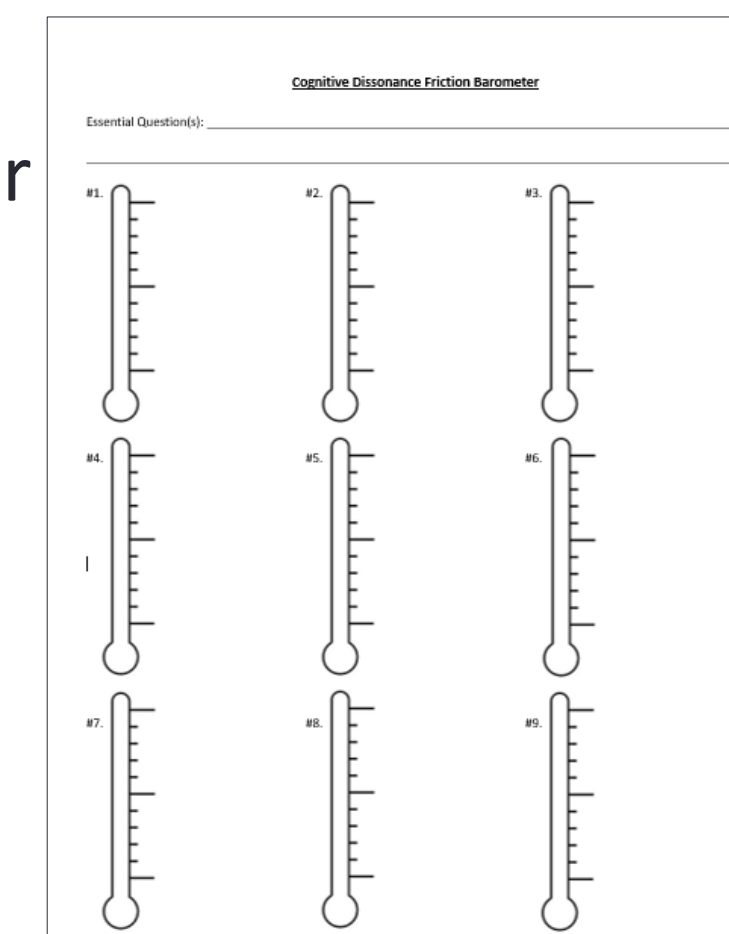
TEACHING IMPLICATIONS

By encouraging students to consider other perspectives and react logically to ideas that challenge their own, students learn a form of cognitive dissonance. Since students will be writing a persuasive essay requiring them to research both sides of an argument, they may experience or encounter cognitive dissonance. Preparing students with necessary tools to measure emotions they experience while learning of opinions or sensitive information potentially contrary to their own beliefs gives students practice for when they may experience cognitive dissonance with various texts/info in language arts, other classes, and throughout their lives. Students come to understand that cognitive dissonance is entirely normal, something everyone experiences throughout their lives, and how this uncomfortableness is actually a positive opportunity for reflection and growth. This is a valuable skill not only during the process of researching and writing their own persuasive essays, but to also transfer this recognition while approaching other students' essays and belief systems with an open mind or at least try to see things from their perspective in other situations.

LESSON PLAN OVERVIEW

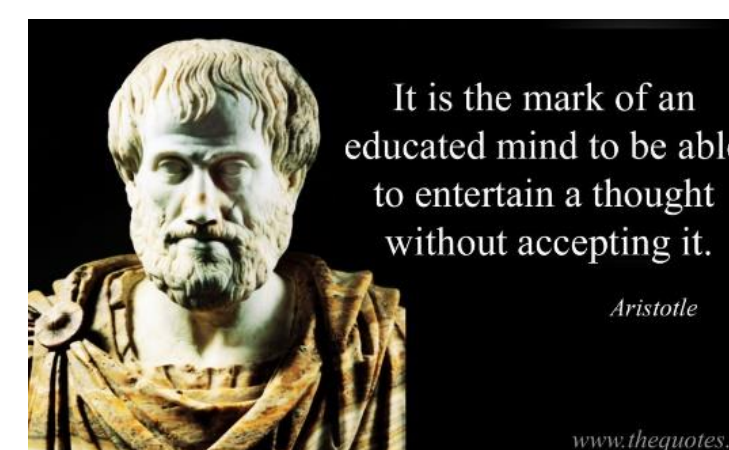
Students are asked 9 times throughout the PowerPoint presentation and discussion to reflect on any cognitive dissonance experienced. Students take turns reading aloud each slide.

- Using the Cognitive Dissonance Friction Barometer handout, begin to measure the "mental pressure" or "friction" the information is creating when juxtaposed with currently held knowledge and beliefs
- Students write what the presented information was and any thoughts regarding their level of cognitive dissonance



Possibility for cognitive dissonance (or increased "pressure") is scaffolded:

- Gives gradual introduction to recognizing own cognitive dissonance
- Helps students examine why certain types of information can evoke more mental friction



Reflection on information, barometer handout, and above quote in whole-class discussion with leading questions, including:

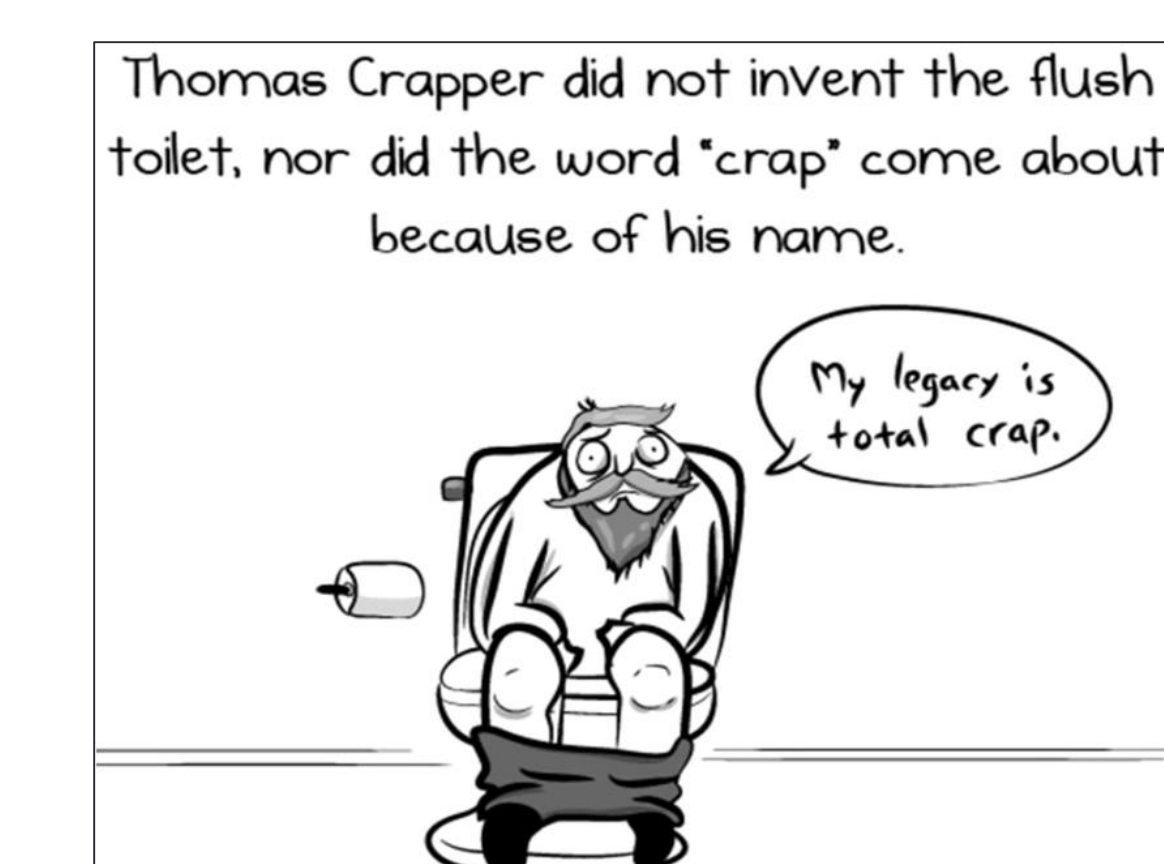
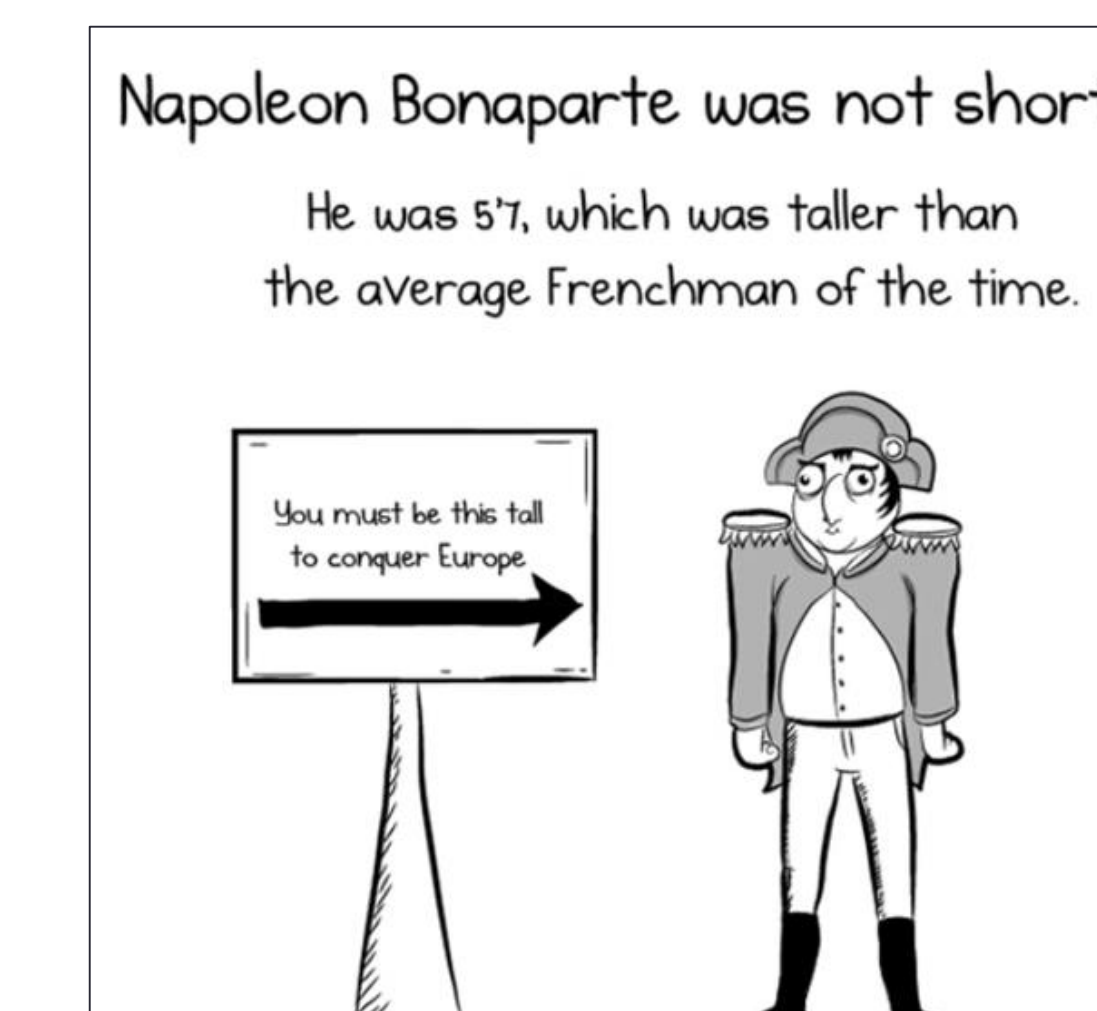
- "Does all this mean you HAVE to change your ideas just because someone said something contrary?"
- "What does it mean?"
- "Why did we learn about cognitive dissonance before working on a persuasive essay?"
- Why is it beneficial to be able to identify when we are experiencing cognitive dissonance?

A PEEK INTO THE POWERPOINT

Comic slides are from *The Oatmeal* created by Matthew Inman specifically for the classroom. All other slides and materials are original.

Inman's comic was intended for American students, and therefore has strong ties to US history, which may be foreign and not elicit cognitive dissonance from students unfamiliar with particular persons or concepts. Lesson plan presentation can be adapted to portray topics relevant to specific countries, states, counties, or cities to ensure as many students as possible connect with the content.

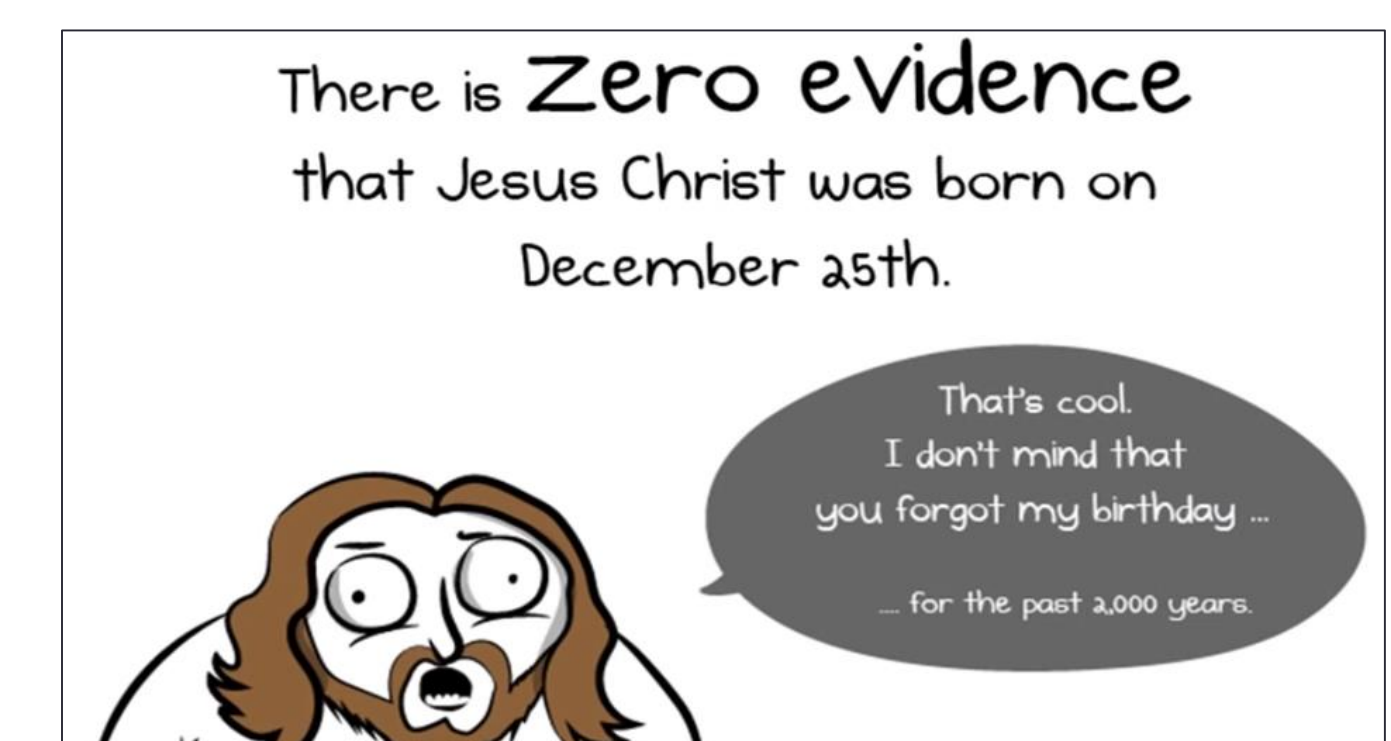
Low Cognitive Dissonance



Higher Cognitive Dissonance

The Pledge of Allegiance was written by a socialist.

Six of the seven justices who voted in favor of Roe v. Wade were Republican-appointed.



Final slide, students work in pairs to answer questions:

- If you're discussing a topic with someone and they refuse to listen to anything you say, how frustrating can that be?
- What if, in frustration, you insult them or their argument? Is this constructive? Does it help them want to see your side of things?
- What if you only read information in support of your side because you were uncomfortable considering opposing viewpoints? Does this make your argument stronger or weaker?
- How can the back-fire effect limit your understanding of the world or create a lack of empathy?
- What can you do when you experience cognitive dissonance? Brainstorm ideas on the back of your Cognitive Dissonance Friction Barometer handout.